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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/690,694	10/16/2000	YUJI TAKAMIZAWA	P5285A	3266

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EXAMINER	
NGUYEN, MADELEINE ANH VINH	
ART UNIT	**PAPER NUMBER**
2625	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/08/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/690,694	TAKAMIZAWA ET AL.	
	Examiner	Art Unit	
	Madeleine AV Nguyen	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 November 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,5-11,13-18,21 and 22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3, 5-11, 13-18, 21-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed on November 17, 2006 have been fully considered but they are not persuasive for the following reasons:

a. Applicant remarks on the limitation, which is canceled in the amended claims such as "immediately after said state detection means ...from said computer. The reason of the combination of Akiyama et al and Kim is that "Akiyama fails to teach the automatically clearing the receive buffer immediately after the station detection means detecting the first state without need of a real-time buffer clearing command from the computer" as stated in the last office action. In Akiyama, the computer sends a real-time buffer clearing command to the printing system to clear the receive buffer. Without that limitation, previous rejection of the claims over Akiyama only is repeated. There is no need to discuss on the combination of Akiyama and Kim since there is no need to use Kim for the limitation already deleted. A new limitation of a data discarding means which was claimed in claim 4 is added in the independent claims. However, since claim 4 was previously rejected over Akiyama, the same rejection is also added in the independent claims.

A personal interview was conducted with Mr. Rosalio Harold on December 18, 2006 to accelerate the issue but there has been any response.

The rejection of the claims over Akiyama is maintained as in one of previous actions.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-3, 5-11, 13-18, 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akiyama et al (US Patent No. 5,594,653).

Concerning claims 1, 21, Akiyama et al discloses a printer (printing apparatus side, Fig.1) adapted to be connected to a host computer (61, Fig.2) and to receive data including control commands from the host computer comprising a receive buffer (65, 67) for temporarily storing received data; a data interpreter (66) for interpreting the data in the receive buffer; control means (68) responsive to the data interpreter for controlling the printer; state detection means (71-76) for detecting whether the printer is in a first state (off-line or when an error occurs) in which data is received and the received data is not printed, or in a second state (on-line) in which data is received and the received data is printed; clearing means (Table 1when n=8) for clearing the received buffer, characterized in that the clearing means is effective for automatically clearing the receive buffer when it receives a clearing command from the computer; a data discarding means (Figs. 5, 7-8, 10, 11; Abstract; col. 8, lines 21-64; col. 9, lines 18-60; col. 13, line 1 - col. 14, line 20; col. 15, lines 31-67; col. 16, line 60 – col. 18, line 18).

Akiyama does not directly teach that the data discarding means is for discarding print data and not discarding command data received from the host computer. However, in the

Abstract of the Invention, Akiyama teaches, "a control command interpreter whereby control commands can be interpreted even in an off-line state." When the printer is off-line state, "Control means 68 monitors the error information, and stops operation of the printing apparatus until the error information is cleared" (col. 9, lines 46-48) or "(step 107) is to notify the host computer that the printing apparatus cannot receive further communication data, i.e., that is off-line" (col. 15, lines 34-35). In other words, the printing data is discarded since the printing mechanism is stopped (152, Fig.9 or 109, Fig.10). However, the printing apparatus side does not discard command data received from the computer while the printing apparatus side is off-line. For instance, "Real-time command interpreting means 64 interprets and executes the received data at the same time it is received, and the process is executed during the interrupt sequence together with data receiving means 62. Real-time command interpreting means 64 determines whether the received data is a real-time control command, and executes the specified process based on the command if the received data is determined to be a real-time control command." (col. 8, lines 4-11), "received commands are interpreted by real-time command interpreting means 64, which is activated by a receive interrupts, before being stored in the receiving buffer. As a result, the command can be processed even if the transmitted data is not stored" (col. 8, lines 51-54), "control means 68 stopping printing apparatus operation, ... but real-time command interpreting means 64, which is activated by a receive interrupt from inter 51, continues to operate irrespective of the error." (col. 9, lines 49-54), and "The received data is also temporarily stored in the receiving buffer even if the data is a real-time command (stop 132)." (Fig.8; col. 14, lines 7-8). It would have been obvious to one skilled in the art at the time the invention was made to consider that Akiyama teaches a data discarding means since Akiyama teaches that

when the printing apparatus side is in the first state (data is received and the received data is not printed), it continues to receive data and if the data is a real-time control command, the real-time command interpreting means 64 executes the specified process based on the command while discarding the print data since the control means 68 stops the printing apparatus operation by stopping the command interpreter 68 and clear print buffer 67.

Concerning claims 2-3, 5, 6, 7, 22, Akiyama et al further teaches a setting means (64, 69, and 77 Fig.5) for setting data handling mode that determines how data are handled when the printer is in the first state (off-line state); and reading means (73) for reading the data handling mode in response to the printer entering the first state; wherein the clearing means is adapted to clear the receive buffer only when the data handling mode is set (n=8) to allow clearing of the receive buffer (claims 2, 22), (122, Fig.7; 146, Fig.8; 112, Fig.10); the setting means is adapted to set the data handling mode in response to a specific control command from the host computer (2), (claim 3), (col. 8, lines 4-64; col. 10, lines 5-11; col. 15, lines 30-65; col. 16, line 62 – col. 17, line 25); the data discarding means is adapted to discard data only when the data handling mode is set to allow discarding the data received from the host computer (claim 5), (col. 13, line 1 - col. 14, line 20; col. 15, lines 31-67; col. 16, line 60 – col. 18, line 18); a print buffer (67) for storing expanded print data wherein the clearing means is adapted to clear both the receive buffer and the print buffer (claim 6), (col. 8, lines 23-33; col. 14, lines 1-6); the first state is an off-line state in which the data interpreter (66) does not interpret received print data and does interpret received command data, and the second state is an on-line state in which the data interpreter interprets received data, (claim 7), (Abstract; col. 8, lines 4-64; col. 9, lines 18-60; col. 15, lines 30-65; col. 16, line 62 – col. 17, line 25).

Claim 8 is method claim of apparatus claim 1. Claim 8 is rejected for the same rationales set forth for claim 1 above.

Concerning claims 9-11, 13-18, Akiyama et al further teaches that the clearing step is accomplished immediately after the first state is detected, (claim 9), (146, Fig.6; col. 14, lines 1-6); setting a data handling mode so as to either allow or not allow clearing of the received buffer (col. 13, line 34 – col. 14, line 6); reading the data handling mode in response to detection of the first state, wherein the clearing step comprises clearing the receive buffer only when the data handling mode read in step reading allows clearing of the receive buffer, (claim 10), (col. 13, line 34 – col. 14, line 6; col. 16, line 62 – col. 17, line 22); the setting step is accomplished according to a specific control command from a host computer 2, (claim 11), (col. 13, line 34 – col. 14, line 6; col. 16, line 62 – col. 17, line 22); the step of discarding data comprises discarding data only when the data handling mode read in reading step further allows discarding the data received from the host computer, (claim 13), (Figs.7, 8, 10; col. 13, line 21 – col. 14, line 25; col. 15, lines 30 –65; col. 16, line 60 - col. 17, line 25); a step of saving in the receive buffer data received from the host computer after the receive buffer was cleared in the clearing step and until the detecting step detect the second state, (claim 14), (Figs.7, 8, 10; col. 13, line 21 – col. 14, line 25; col. 15, lines 30 –65; col. 16, line 60 -,col. 17, line 25); a step of clearing the receive buffer when the second state is detected in the detecting step after the first state had been detected, (claim 15), (Figs.7, 8, 10; col. 13, line 21 – col. 14, line 25; col. 15, lines 30 –65; col. 16, line 60 -,col. 17, line 25); a clearing mode for clearing received data or contents stored in the memory, (claim 16-17), (Figs.7, 8, 10, 13), the first state is an off-line state and the second state is an on-line state, (claim 18), (col. 16, line 60 – col. 17, line 25).

Conclusion

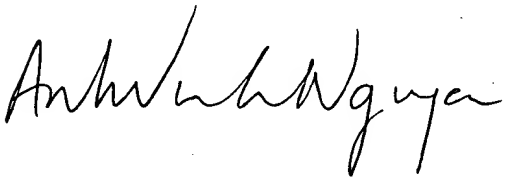
4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Madeleine AV Nguyen whose telephone number is 571 272-7466. The examiner can normally be reached on Tuesday-Thursday 12:30-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on 571 272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Madeleine AV Nguyen
Primary Examiner
Art Unit 2625

January 31, 2007